

International (PCT) Patent Application No: PCT/GB2004/002609  
{ex GB 0314815.2}  
'Bag In Box'  
John Stephenson  
Our ref: DC419.IP04.018

**10/561676**

**IAP20 Rec'd PCT/PTO 20 DEC 2005**

Claim Amendment 25 April 2005

Claims 1 through 22 as originally filed retained + repeated for reference;  
Supplementary Claims 23 through 28 entered:

1.  
A Bag In Box (BIB) container [package] (10)  
- for flowable materials,  
including liquid, solid powders or particles -  
with an inner (contents) bag liner (12)  
locatable within an outer box carton (11)  
has a neck piece (14),  
between a bag neck (13) and carton aperture (24).
2.  
A container package, as in Claim 1,  
with a carton lid flap  
incorporating cuts, creases or folds  
to allow folding as an inset ledge or recessed shelf,  
with a cut-out or aperture for a bag neck,  
and a neck piece configured as a shallow tray,  
to sit within the shelf recess,  
to accommodate a protruding bag neck  
within a uniform, say rectangular, overall carton form.
3.  
A container package, as in either preceding claim,  
with a retractable (fold-out) pourer spout.
4.  
A container package, as in any preceding claim,  
with a retractable (fold-out) handle.
5.  
A container package, as in any preceding claim,  
with a lockable closure.
6.  
A container package, as in any preceding claim,  
with discrete neck piece insert.
7.  
A container package, as in any preceding claim,  
with neck piece (part) integrated with box carton.
8.  
A container package, as in any preceding claim,  
with neck piece (part) integrated with bag liner insert.

9.

A container package, as in any preceding claim, with a frangible tamper-evident seal, about a removable closure.

10.

A container package, as in any preceding claim, with a box carton of moisture resistant material, such as a sealed or coated board, or synthetic plastics.

11.

A container package, as in any preceding claim, with a reinforced box carton material, such as laminated, corrugated or fibre stranded.

12.

A container package, substantially as hereinbefore described, with reference to, and as shown in, the accompanying drawings.

13.

A BIB container package,  
- for liquid or flowable material (contents) -  
comprising a bag inner liner  
and a box carton outer (shell);  
with a bag (neck) location and support element,  
configured as any one, or a combination of:

- discrete insert,
- element integral with the bag,  
or some part of the bag,  
such as the bag neck or neck rim,
- element integrated with the carton,  
or some part of the carton,  
such as an end flap;

to create a (shallow) recess for a protruding bag neck.

14.

A pre-formed, neck piece for a container,  
as claimed in any preceding claims.

15.

A container comprising  
an outer box or carton  
with an edge recessed panel  
and an internal bag liner  
located and retained within the carton  
by a neck support collar  
such that a protruding bag neck

is inset within the recess.

16.  
A BIB carton,  
with box or carton outer wrap, sleeve or case  
and bag inner liner element  
mutually juxtaposed and entrained  
preparatory to bag contents fill.

17.  
A BIB carton of Claim 16  
with a pre-fabricated handle.

18.  
A BIB carton of Claim 16  
with integrated neck collar and handle moulding.

19.  
A BIB carton of Claim 16  
with integral moulded collar and bag neck.

20.  
A location and/or retention element  
for juxtaposition or interposition between  
bag liner and outer box or carton.

21.  
A BIB carton  
with a location and/or retention element of Claim 20  
captive to a bag neck and entrained by a neck rim.

22.  
A BIB assembly of juxtaposed  
bag inner and box outer elements  
mutually entrained by an intermediate element.

Supplementary claims ...

23.  
A Bag In Box (BIB) carton container,  
with a carton panel profile and panel aperture  
to accommodate a discrete neck piece or collar  
configured as a shallow tray,  
to sit within the outer carton profile,  
to accommodate and retain a bag neck  
protruding into the tray  
for ease of neck access in contents fill and discharge  
and closure cap installation and removal  
yet inset within a rectilinear, say rectangular, overall carton form

24.  
A container of Claim 23,  
with a neck piece configured as a local spillage barrier

over an underlying carton wall portion  
upon contents fill and discharge.

25.

A container of Claim 23,  
with a spillage tray  
open along an exposed edge  
at a carton side  
to allow spillage egress.

26.

A container of Claim 23,  
with a closed tray  
for spillage containment  
around a neck spout  
inset from carton top bounding edges.

27.

A container of Claim 23  
with depending tray edge flanges  
to wrap around and locate upon carton edges  
bounding a carton panel aperture  
to inhibit neck or collar rotation.

28.

A container of Claim 23,  
configured for use with standard  
rigid-walled container handling and fill equipment  
to allow fill-line substitution or interchange  
with BIB cartons.